AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1-12. (Cancelled)

13. (Currently Amended) An electronic apparatus forming one of a sensor, an actuator and a control that communicates with at least one additional electronic apparatus via a data bus using a pre-determined communications protocol, the electronic apparatus comprising:

a bus interface;

a control engine that comprises:

an application-specific engine that controls the electronic apparatus independently of the <u>pre-determined</u> communications protocol; and

a bus protocol-specific engine that transmits and receives data via a bus interface;

wherein said application-specific engine and said bus protocol-specific engine are decoupled from one another and said bus protocol-specific engine exchanges application-specific data with said application-specific engine via a standardized interface; and

wherein data received via the standardized interface is converted into the <u>pre-determined</u> communications protocol by the bus-protocol-specific engine and data

received via the bus interface is converted into corresponding application-specific data by the bus-protocol-specific engine.

- 14. (Previously Presented) The electronic apparatus of claim 13, wherein the control engine includes a plurality of bus protocol-specific engines and a plurality of bus protocols, each of the bus protocol-specific engines being associated with a bus protocol and wherein each bus protocol-specific engine converts application-specific data into the associated bus protocol and converts data received via the bus interface in the associated bus protocol into application-specific data.
- 15. (Previously Presented) The electronic apparatus of claim 14, wherein a different bus interface is associated with each bus protocol-specific engine.
- 16. (Previously Presented) The electronic apparatus of claim 14, wherein at least some of the bus protocol-specific engines are associated with a single bus interface and a selection support unit implements a select bus protocol-specific engine.
- 17. (Previously Presented) The electronic apparatus of claim 16, wherein the bus protocol-specific engine is manually selected using the selection unit.
- 18. (Previously Presented) The electronic apparatus of claim 16, wherein the bus protocol-specific engine is automatically selected using the selection unit based on a currently implemented bus protocol.

- 19. (Previously Presented) The electronic apparatus of claim 13, wherein a set of elements is communicated to the control engine, each of which defines a type of permitted application-specific data.
- 20. (Previously Presented) The electronic apparatus of claim 19, wherein said set of elements includes at least one of variables, methods, messages and events.
- 21. (Currently Amended) A configuration apparatus for configuring an electronic apparatus that is one of a sensor, an actuator and a control, the configuration apparatus communicating with the electronic apparatus via a data bus using a predetermined communications protocol and comprising:

a bus interface;

a configuration engine that comprises:

an application-specific engine that controls the configuration apparatus independently of a the pre-determined communications protocol; and

a bus protocol-specific engine that transmits and receives data via a bus interface;

wherein said application-specific engine and said bus protocol-specific engine are decoupled from one another and said bus protocol-specific engine exchanges application-specific data with said application-specific engine via a standardized interface that is common to a standardized interface of the configuration electronic apparatus; and

wherein data received via the standardized interface is converted into the communications protocol by the bus-protocol-specific engine and data received via the bus interface is converted into corresponding application-specific data by the bus-protocol-specific engine.

- 22. (Previously Presented) The configuration apparatus of claim 21, that reads out and sets application-specific pre-determined settings of the electronic apparatus that is to be configured.
- 23. (Previously Presented) The configuration apparatus of claim 21, wherein the configuration apparatus is provided as a computer and the configuration engine and the bus protocol-specific engine are provided as computer programs.
- 24. (Previously Presented) The configuration apparatus of claim 23, wherein the computer includes at least one of a personal computer (PC) and a handheld device.
 - 25. (Currently Amended) A bus system, comprising:

a data bus; and

a plurality of <u>electronic</u> apparatuses each of which is one of a sensor, an actuator and a control <u>that communicates with at least one additional electronic apparatus via a data bus using a pre-determined communications protocol</u> and each of which comprises:

a bus interface:

a control engine that includes an application-specific engine that controls the <u>electronic</u> apparatus independently of a <u>the pre-determined</u> communications protocol; and

a bus protocol-specific engine that transmits and receives data via a bus interface;

wherein said application-specific engine and said bus protocol-specific engine are decoupled from one another and said bus protocol-specific engine exchanges application-specific data with said application-specific engine via a standardized interface; and wherein data received via the standardized interface is converted into the communications protocol by the bus-protocol-specific engine and data received via the bus interface is converted into corresponding application-specific data by the bus-protocol-specific engine.

- 26. (Previously Presented) The bus system of claim 25, wherein each of the bus protocol-specific engines are associated with a single bus interface and a selection unit determines which bus protocol-specific engine is implemented.
- 27. (Currently Amended) The <u>bus system configuration apparatus</u> of claim 24, wherein the hand-held device is a PDA.